OFFICIAL WARWICK AMP OWNER MANUAL

Warwick®

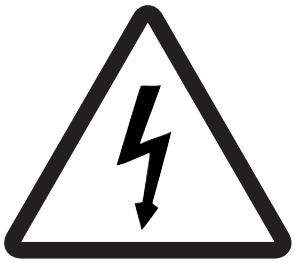
Basses, Amps & Rock'n Roll.

ENGLISH

SAFETY HINTS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow these instructions

Caution: To reduce the risk of electrical shock, do not remove the cover. Or expose this appliance to rain or moisture. No user serviceable parts inside; refer serving to qualified personnel.
Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

Use only with cart, stand, tripod, bracket or table specified by the manufacture, or cart/apparatus combination to avoid injury from tip-over.

ENGLISH

Congratulations on the purchase of the new Warwick amplifier head. Please read through these instructions before connecting and operating the device. If you keep to the guidelines set out in this manual, you will soon be able to appreciate the quality of this new Warwick amplifier. Please keep this instruction booklet handy in case you need to consult it again. Please send the PASSPORT to the address indicated therein.

RECOMMENDATIONS

The following recommendations are designed to ensure that the device always functions reliably:

- Never open the casing! To do so would expose you to the risk of an electric shock. Should repairs prove necessary, leave them to qualified service personnel.
- Avoid dust and high moisture levels, direct sunlight and extremely high or low temperature.
- Safeguard the device from excessive vibration. Always place the unit on a stable and horizontal surface.
- See to adequate ventilation. The device should not be placed on soft surfaces (carpet, cushions, etc.). When mounting it in a rack, make sure that the rear and lateral cooling vents remain unobstructed.
- Avoid leaving the unit near radiators or other objects producing heat.
- Internal components should only be adjusted or cleaned by qualified service technicians. Ensure no object or liquid penetrates the device through its cooling vents.
- When replacing a fuse make sure you fit in one of identical value!

Have the device examined by a qualified service technician in the following cases:

- the mains lead or mains switch have been damaged,
- objects or liquids have penetrated the device,
- it has been exposed to excessive moisture,
- malfunctions or abnormal operating conditions have occurred,
- the device has been dropped or the casing damaged.

HINTS

- This apparatus shall not be exposed dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- This apparatus should be connected to a MAINS socket outlet with a protective earthing connection.
- Mains plug or appliance connector shall be used as the disconnect device, so mains plug or appliance connector should always remain readily opearable.
- If the apparatus shows any malfunction, immediately disconnect the main power cord from the mains socket.
- Do only operate effects pedals in-between the instrument and the amplifier, as these devices are not designed for the supplied load of an effects loop.
- Remove the plug whenever changing a fuse.
- Only ever replace a fuse with another of the same type. Never bridge defective fuses.
- Make sure the top and bottom of the device are properly ventilated and that the vents are not blocked.
- Do not subject the device to excessive vibration or hard jolts as these could damage the device.
- Don't undertake repairs yourself.
- Only allow the case to be opened by qualified personnel. (Remove the plug).
- Repairs should only be undertaken by qualified personnel.

SHOULD YOU FIND YOURSELF ONE DAY WONDERING: "WHY IS THERE NO SOUND COMING OUT?"
please check:
- all stub cables,
- all connections of these cables

and proceed anew by following the guidelines of the chapter GETTING STARTED. Possibly the problem reveals to be an operational error.

PROTECTIVE CIRCUITS

Your new Warwick amplifier is equipped with a series of circuits to prevent it from destruction in case of inadequate operating conditions:

Power-up delay: When the unit is switched on, the SPEAKER OUT sockets are activated with a slight delay to protect the loudspeakers.

Short-circuit: In the event of a short-circuit at the power amp outputs, this feature prevents the output stage transistors from destruction by quickly reducing current.

Direct current (DC): This circuit continuously monitors the power amp output for direct current and protects the loud speakers from overload should a transistor burn out.

HF oscillation: By switching the power amp off, this safety feature prevents from damages that could be caused by frequencies in excess of 20 kHz (feedback, etc.).

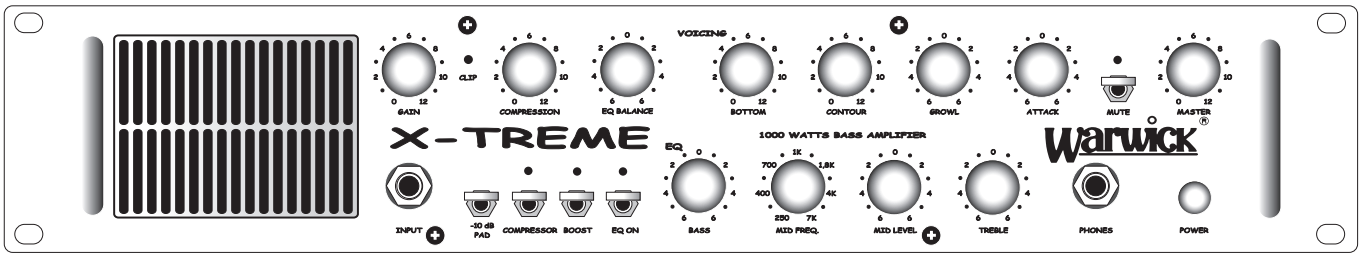
Excessive temperatures: Should the temperature-regulated fan cooler prove to be insufficient in extreme conditions, this circuit protects the output stage transistors from destruction by switching the device off.

Note: Note: You can recognise that one of these circuits has been activated as a result of a fault, when the **MUTE LED** glows continuously even though you have not selected the MUTE mode. In case of a shortcircuit please check the speaker cable. The amplifier must then be switched off and on again, to get back into playing mode after having removed the short-circuit. In any other situati on the amplifier switches automaticallyback to playing mode as soon as it detects the fault has disappeared (e.g. the amplifier has overheated and cooled down again).

GETTING STARTED

1. Make sure that loudspeakers capable of sustaining the load of a bass signal are connected to the **SPEAKER OUT** sockets (the speaker cables should meet a cross-section of at least 2 x 1.5 mm).
2. Check that the mains supply has been plugged in and that all external (effects) units possibly used are correctly connected and operational.
3. Set the **MASTER** control to zero.
4. Plug your bass guitar into the amplifier's **INPUT** with a shielded line-cable.
5. Press the **POWER** switch to turn the device on.
6. The tubes need a few minutes until they have reached their optimal operating temperature (TubaPath).
7. Switch **MUTE** off and the red LED will extinguish.
8. Turn all volume controls of your bass guitar on to their maximum.
9. Adjust the **GAIN** control until the (loudly) played bass signal flashes the Clip LED (X-Treme).
10 Set the **MASTER** control to the volume you wish to play at.
11. Adjust the sound that you wish with the controls and switches described in the respective chapters FRONT PANEL CONTROLS.
12. If necessary readjust **GAIN** setting. The Tube Sat LED indicates the saturation of the tubes, which will produce a more compressed and overdriven sound (TubePath).

FRONT PANEL CONTROLS



INPUT socket to plug in a bass guitar.
GAIN control + CLIP LED to adjust the input level*.
-10 dB **PAD** switch to set the range of the GAIN control. Use it with high output basses.
COMPRESSOR switch + 2-colored ON/COMPRESS LED to compress the signal. In position up the compressor is on, in middle position off, in down position it is on if the EQ section is activated.
COMPRESSION control to set the compression ratio.
BOOST switch to activate a second volume level. In down position +2dB, in up position +6dB, in middle poistion the boost is off. Activating the BOOST does automatic ally activate the Compressor.*
EQ ON switch activates the EQ section*.
EQ BALANCE control to balance the volume level with EQ on and EQ off.*

VOICING SECTION:*

BOTTOM control to extend the low frequency range. Use this at lower volume settings or for ultra low sounds. At higher volumes it might be better to reduce the low range.
CONTOUR control boosts lows and highs, while cutting mids.
GROWL control for boosting/cutting low mids.
ATTACK control for boosting/cutting presence.

EQ SECTION:*

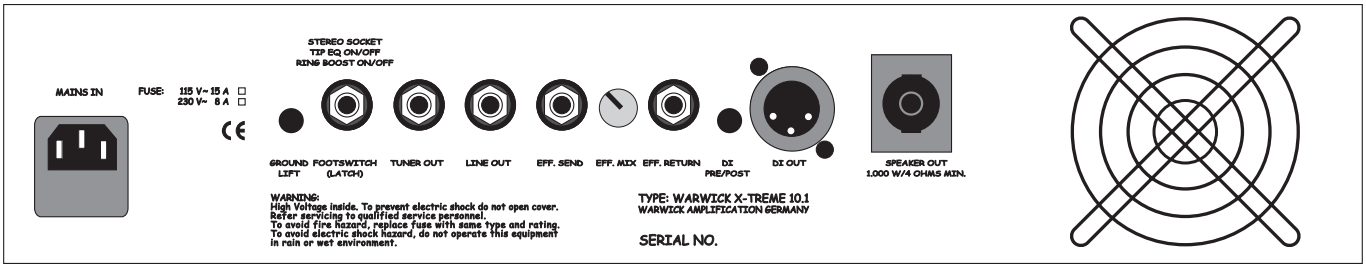
BASS control to boost/cut deep frequencies.
MID FREQ. control to determine a frequency.
MID LEVEL control to boost/cut the frequency adjusted with the MID FREQ. control.
TREBLE control to boost/cut high frequencies.

MUTE switch + ON/MUTE LED cuts the signal from all outputs, except from the PHONES socket, and activates the TUNER output (rear panel). In case of signal flow at the power section (Input or Effects Return), there might appear a popping noise when MUTE is switched. To avoid this, mute your strings and have effects like delays muted when switching MUTE.
MASTER control determines the mains level.
PHONES socket for connecting a headphone (min 200 Ω)
POWER on/off switch for the Mains Power.

* Note: after adjusting the voicing section, the BOOST or activating the EQ section the Gain control needs to be adjusted that the level is under the CLIP point.

X-TREME

REAR PANEL CONTROLS


STEREO SOCKET
TIP EQ ON/OFF
RING BOOST ON/OFF
MAINS IN
FUSE: 115 V~ 15 A
230 V~ 8 A
GROUND LIFT
FOOTSWITCH (LATCH)
TUNER OUT
LINE OUT
EFF. SEND
EFF. MIX
EFF. RETURN
DI PRE/POST
DI OUT
SPEAKER OUT 1.000 W/4 OHMS MIN.
WARNING:
High Voltage inside. To prevent electric shock do not open cover.
Refer servicing to qualified service personnel.
To avoid fire hazard, replace fuse with same type and rating.
To avoid electric shock hazard, do not operate this equipment in rain or wet environment.
TYPE: WARWICK X-TREME 10.1
WARWICK AMPLIFICATION GERMANY
SERIAL NO.

MAINS IN AC AC Terminal with integrated fuse compartment for connection to the mains power supply.

GROUND LIFT Switch isolates the earth connection from the ground of signal. Should several devices be simultaneously connected to earth by the same conductor as well as via line connections, a so called hum loop might appear. In this case operate GROUND LIFT to eliminate the current hum (when pressed).

FOOTSWITCH Socket to connect a double latch footswitch with a stereo jack. The tip switches Boost on/off, the ring switches the EQ on/off.

TUNER OUT Socket for a tuning device. The pure bass signal is available at this socket when the amp is switched MUTE.

LINE OUT Output for connection to an external power stage (post MASTER)

EFF. SEND & EFF. RETURN Sockets to implement the effects loop. Connects the input of the effects to the SEND socket and its output to the RETURN socket.

EFFECT MIX control determine the degree to which the effects within the parallel loop affect the signal.

DI PRE/POST When this switch is depressed, the signal at the DI OUT socket is the pure bass signal (PRE). Otherwise it is the signal after the tone controls and any connected effects devices have done their work (POST)

DI OUT Balanced output for the connection to a mixing desk (PA or Studio).

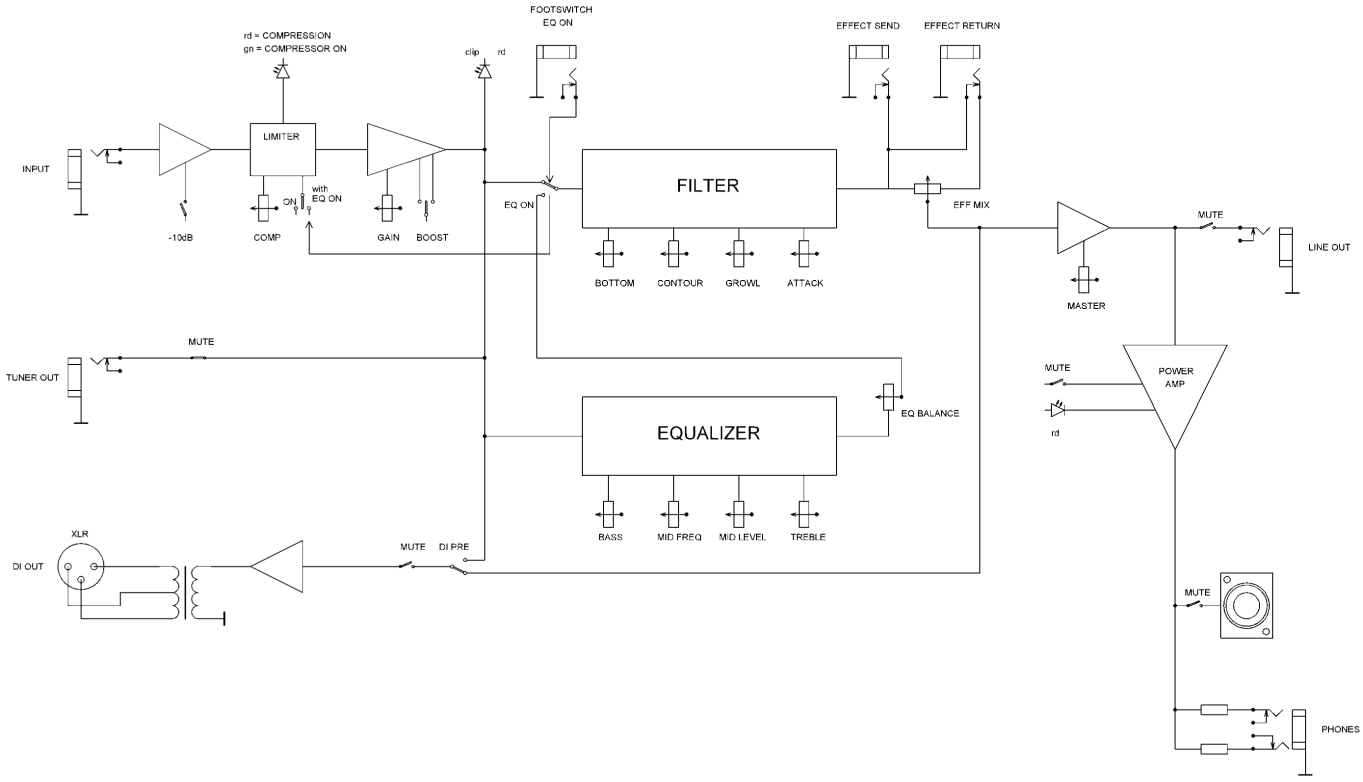
SPEAKER OUT Lockable Coaxial Speaker Connection and 1/4" jack socket (only X-TREME 5.1) are connected parallel.

X-TREME

TECHNICAL DATA X-TREME 5.1 / 10.1

Input	25 mV	
Preamp	transistor; active controlled	
Poweramp	fan cooled (temperature controlled)	
Gain	Clip LED	Indicates the optimal input level
Equalizer	Bass Mid Level Hi Boost	±10dB @ 80Hz ±10dB (selectable frequency range 250Hz to 7kHz) ±12dB @ 9 kHz +3dB / +6dB
Voicing	Bottom Contour Growl Attack	+5dB @ 70Hz -3dB @ 110Hz / -16dB @ 320Hz / +14dB @ 14kHz ±10dB @ 220Hz ±10dB @ 1,1kHz
Switches (FS-Food Switch)	-10dB pad, boost (FS), compressor, EQ on/off (FS), mute	
Headphone	200 ohms min.	
Direct Out	0dB, 600 ohms	
Effects Loop	mono parallel send 0dB, 600 ohms return 0dB, 10k ohms	
Switches Rear	Groundlift, DI pre/post	
Speaker Out	jack (X-Treme 5.1 only) and lockable coaxial 500 W / 4 ohms (X-Treme 5.1) 1.000 W / 4 ohms (X-Treme 10.1)	
THD	< 0.1 % (power amp)	
Weight	15.2 kg (X-Treme 5.1) 19.0 kg (X-Treme 10.1)	
Dimensions	19" / 458 x 90 x 410 (w*h*d)	

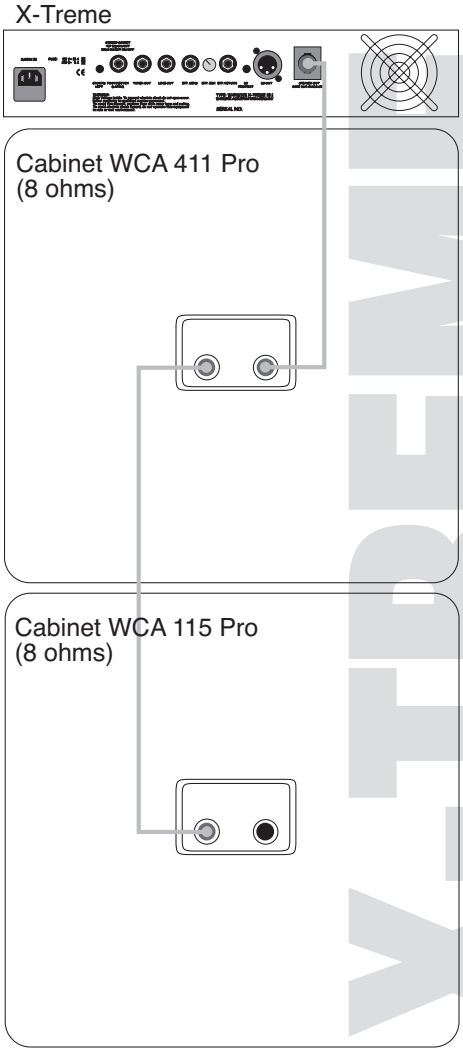
SIMPLFITIED DIAGRAM



CONNECT SPEAKERS

Note: The minimum load of the power amplifier is 4 ohms.

Speaker Set-up	
Quantity	**Impendance**
4	16 ohms Cabinets
2	8 ohms Cabinets
1	6 ohms Cabinet
1	4 ohms Cabinet



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